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10/661,167

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EXAMINER

GOFMAN, ALEX N

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/661,167	<b>Applicant(s)</b> SMIRNOV ET AL.	
	<b>Examiner</b> ALEX GOFMAN	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 32-42, 44-48, 50-52, 55, 56, 59, 60 and 65-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-42, 44-48, 50-52, 55, 56, 59, 60 and 65-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on June 22, 2010 has been entered.

### ***Response to Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive.

As arguments of Claim 32, the Applicant states that Lee does not disclose the limitation "calling a dynamic function defined in the first compound transform definition, the dynamic function located elsewhere from the definition pointer position." The Examiner respectfully disagrees.

The only place in the specification of the instant application dealing with dynamic functions is found in paragraph [0042] and it states that "A dynamic function is illustrated in FIG. 4B lines 80-87. Dynamic functions are optionally configured to perform logic operations, external process calls, or other operations

associated with a computer function and to transform payload Data 230 in response.”

Lee [0330] describes having a peripheral program, [0331] further describes calling the peripheral program “as part of the translation process.” This means that the peripheral program is part of the transformation process, including a part of the “first compound transform definition.” Also, Lee [0302] describes a data registry file which is a lookup table that contains data used for determining a specific output structure. Calling of the registry file may also be considered a “dynamic function” since it is part of the compound transform definition and it calls an external program.

Therefore, Lee discloses the argued limitation of Claim 32.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 32-42, 44-48, 50-52, 55-56, 59-60 and 65-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US Patent Application Publication

2002/0129024), hereinafter, Lee in view of Chung et al (US Patent 6,850,947), hereinafter, Chung.

**Claim 32:** Lee discloses a method of transforming data, the method comprising:

a. positioning a definition pointer to point at a first compound transform definition within a transform process definition [0321]. [The program identifies entries for a name, Bob Smith. The name may serve as a specific identifier like a pointer. Information related to Bob Smith is found and transformed into the appropriate format.]

b. invoking a processing thread to read the pointed at first compound transform definition [0321].

c. searching data to be transformed for a data element to be transformed, the search being responsive to the first compound transform definition [0321].

d. calling a dynamic function defined in the first compound transform definition, the dynamic function located elsewhere from the definition pointer position [0302, 0331]. [The calling of the peripheral program is "part of the translation process" and thus part of the "first compound transform definition."]

e. transforming any found data element into an output data file, responsive to the first compound transform definition and called dynamic function, a data

structure of the output data file being responsive to a data structure of the transform process definition [0321, 0323, 0329].

f. positioning a definition pointer to point at a second compound transform definition within the transform process definition [0321].

g. invoking a second processing thread to read the pointed at second compound transform definition [0321, 0323]. [*The pointing to a specific "process definition" is done once a specific template is identified.*]

h. searching data to be transformed for another data element to be transformed, the search being responsive to the second compound transform definition [0321, 0323].

i. transforming any found data element into the output data file, responsive to the second compound transform definition, the data structure of the output data file being responsive to the data structure of the transform process definition [0308].

Lee, as discussed above, discloses data transformation using a plurality of templates (templates are similar to transform definitions). However, Lee lacks the concurrent/parallel processing of multiple transform definitions.

However, Chung does (Col 7 In 15-22; Col 7 In 52-66). Chung discloses concurrently transforming data with multiple transformation definitions. The transform definitions are for example, aggregation transformation, filter transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Chung. One would have been motivated to do so in order to concurrently transform data so that “data contention is reduced and throughput is increased.”

**Claim 33:** Lee as modified discloses the method of Claim 32 above and further discloses determining a type of the read first compound transform definition and, if the first compound transform definition is not a simple transform definition type, recursively calling the method of claim [0247, 0305, 0312].

**Claim 34:** Lee as modified discloses the method of Claim 32 above and further discloses including determining if all sub-definitions of a compound transform definition have been processed [0293, 0305, 0312].

**Claim 35:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the method of transforming data includes nesting of a data element [0305, 0312].

**Claim 36:** Lee as modified discloses the method of Claim 32 above and further discloses if no data element is found in the step of searching data to be transformed, adding an output data file element to the output data responsive to the read first compound transform definition, the data to be transformed having no contribution to the output data element [0308, 0329].

**Claim 37:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the read transform definition includes a value

parameter configured to specify a value for inclusion in the output data file [0318].

**Claim 38:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the data element is a compound data element and the read transform definition includes a source record parameter configured to specify the compound data element [0308].

**Claim 39:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the read first compound transform definition is in a meta-language format [0308, 0312].

**Claim 40:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the data to be transformed data is in a meta-language data format [0308].

**Claim 41:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the read first compound transform definition includes a transform element having an output field name and a source field parameter [0305, 0308, 0312].

**Claim 42:** Lee as modified discloses the method of Claim 32 above and further discloses wherein the read first compound transform definition includes a value parameter configured to populate a field in the output data file [0305, 0308, 0312].



**Claim 44:** Lee discloses a method of transforming data, the method comprising:

a. positioning a definition pointer to point at a transform definition, the first compound transform definition being one of a plurality of transform definitions within a transform process definition [0321].

b. invoking a first processing thread to read the pointed at first compound transform definition and sub-definitions of the first compound transform definition [0321].

c. positioning a first payload pointer to point at a data element to be transformed, the positioning being responsive to a data structure of the first compound transform definition [0321].

d. calling a dynamic function defined in the first compound transform definition, the dynamic function located elsewhere from the definition pointer position [0331]. [The calling of the peripheral program is "part of the translation process" and thus part of the "first compound transform definition."]

e. transforming any found data element into an output data file, responsive to the first compound transform definition and called dynamic function, a data structure of the output data file being responsive to a data structure of the transform process definition [0321, 0323, 0329].

f. positioning the definition pointer to point at a second compound transform definition, the second compound transform definition being within the transform process definition [0321].

g. invoking a second processing thread to read the pointed at second compound transform definition and sub-definitions of the second compound transform definition [0321, 0323].

h. positioning a second payload pointer to point at a data element to be transformed, the positioning being responsive to a data structure of the second compound transform definition [0321, 0323].

i. transforming the second data element into the output data file, responsive to the read second compound transform definition [0308].

Lee, as discussed above, discloses data transformation using a plurality of templates (templates are similar to transform definitions). However, Lee lacks the concurrent/parallel processing of multiple transform definitions.

However, Chung does (Col 7 In 15-22; Col 7 In 52-66). Chung discloses concurrently transforming data with multiple transformation definitions. The transform definitions are for example, aggregation transformation, filter transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Chung. One would have

been motivated to do so in order to concurrently transform data so that “data contention is reduced and throughput is increased.”

**Claim 45:** Lee as modified discloses the method of Claim 44 above and further discloses determining a type of the read first compound transform definition and, if the read first compound transform definition is not a simple transform definition type, recursively calling the method of claim 44 [0247, 0305, 0312].

**Claim 46:** Lee as modified discloses the method of Claim 44 above and further discloses determining a type of the read first compound transform definition and, if the read first compound transform definition is not a simple transform definition type, recursively calling the method of claim 44, wherein the recursive call is responsive to the data structure of the transform process definition [0305, 0308, 0312].

**Claim 47:** Lee as modified discloses the method of Claim 44 above and further discloses further including determining a type of the read first compound transform definition, if the read transform definition is not a simple transform definition type recursively calling the method of claim 44, and determining if all sub-elements of a compound element have been transformed [0305, 0308, 0312].

**Claim 48:** Lee as modified discloses the method of Claim 44 above and further discloses further including determining if all sub-elements of a compound

element have been transformed and, if the determination returns a value of YES, returning to a calling process [0305, 0308, 0312].

**Claim 50:** Lee as modified discloses the method of Claim 44 above and further discloses wherein the method of transforming data includes un-nesting of the data element to be transformed [0305, 0308, 0312].

**Claim 51:** Lee as modified discloses the method of Claim 44 above and further discloses wherein the read first compound transform definition includes a source field parameter configured to specify the data element [0308].

**Claim 52:** Lee as modified discloses the method of Claim 44 above and further discloses wherein the read first compound transform definition includes a source record parameter configured to specify the compound data element [0305, 0308, 0312].

**Claim 55:** Lee as modified discloses the method of Claim 53 above and further discloses including a step of combining the data element with the transform process definition prior to transforming the data element to output data [0308].

**Claim 56:** Lee as modified discloses the method of Claim 53 above and further discloses wherein the transform process definition includes a tree data structure [0139].

**Claim 59:** Lee discloses a computer readable media having embodied thereon data, the data comprising:

a. computer instructions configured to position a definition pointer to point at a first compound transform definition, the first compound transform definition being within a transform process definition [0305, 0307, 0312].

b. computer instructions configured to invoke a first processing thread to read the pointed at first compound transform definition and sub-definitions of the first compound transform definition [0305, 0307, 0312].

c. computer instructions configured to position a first payload pointer to point at a data element to be transformed, the positioning being responsive to a data structure of the first compound transform definition [0305, 0307, 0312].

d. computer instructions configured to call a dynamic function defined in the first compound transform definition, the dynamic function located elsewhere from the definition pointer position [0331]. [The calling of the peripheral program is "part of the translation process" and thus part of the "first compound transform definition."]

e. computer instructions configured to transform the data element into an output data file, responsive to the read first compound transform definition and called dynamic function [0305, 0307, 0312, 0329].

f. computer instructions configured to position a second payload pointer to point at a data element to be transformed, the positioning being responsive to a data structure of the second compound transform definition [0305, 0307, 0312].

g. computer instructions configured to invoke a second processing thread to read the pointed at second compound transform definition and sub-definitions of the second compound transform definition [0305, 0307, 0312].

h. computer instructions configured to transform the second data element into the output data file, responsive to the read second compound transform definition [0305, 0307, 0312].

Lee, as discussed above, discloses data transformation using a plurality of templates (templates are similar to transform definitions). However, Lee lacks the concurrent/parallel processing of multiple transform definitions.

However, Chung does (Col 7 In 15-22; Col 7 In 52-66). Chung discloses concurrently transforming data with multiple transformation definitions. The transform definitions are for example, aggregation transformation, filter transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Chung. One would have been motivated to do so in order to concurrently transform data so that “data contention is reduced and throughput is increased.”

**Claim 60:** Lee as modified discloses the media of Claim 59 above, and further discloses wherein the data further comprises computer instructions configured to employ recursion to transform a compound data element within the data to be transformed [0305, 0307, 0312].

**Claim 65:** Lee discloses an application system comprising:

a. means for positioning a definition pointer to point at a first compound transform definition within a transform process definition [0321].

b. means for invoking a first processing thread to read the first compound transform definition by the computing device [0321].

c. means for calling a dynamic function defined in the first compound transform definition, the dynamic function located elsewhere from the definition pointer position [0331]. [The calling of the peripheral program is “part of the translation process” and thus part of the “first compound transform definition.”]

d. means for positioning the definition pointer to a point at a second compound transform definition within the transform process definition [0305, 0307, 0312].

e. means for invoking a second processing thread to read the second compound transform definition by the computing device [0305, 0307, 0312].

f. means for positioning a payload pointer to point to a first data element, the first data element being a member of a plurality of data elements within data to be transformed [0305, 0307, 0312].

g. means for generating an output data file using the first data element and the first and second compound transform definitions [0305, 0307, 0312, 0329].

h. wherein the means for positioning the definition pointer can be invoked concurrently with the means for positioning the payload pointer [0304].

Lee, as discussed above, discloses data transformation using a plurality of templates (templates are similar to transform definitions). However, Lee lacks the concurrent/parallel processing of multiple transform definitions.

However, Chung does (Col 7 In 15-22; Col 7 In 52-66). Chung discloses concurrently transforming data with multiple transformation definitions. The transform definitions are for example, aggregation transformation, filter transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Chung. One would have been motivated to do so in order to concurrently transform data so that “data contention is reduced and throughput is increased.”

**Claim 66:** Lee as modified discloses the system of Claim 65 above, and further discloses means for selecting the transform process definition from a set of transform process definitions, responsive to data associated with the data to be transformed [0308].

**Claim 67:** Lee as modified discloses the system of Claim 65 above, and further discloses wherein a second data element has no contribution to output data generated using the transform process definition, the second data element being a member of the plurality of data elements [0308].

**Claim 68:** Lee as modified discloses the system of Claim 65 above, and further discloses means for adding data to the output data file, the added data



being configured responsive to the transform process definition and having no contribution from the data to be transformed [0308].

### ***Conclusion***

5. This is a request for continued examination of applicant's earlier Application No. 10/661,167. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX GOFMAN whose telephone number is (571)270-1072. The examiner can normally be reached on Mon-Fri 9am-3pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571)272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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7-7-10  
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